
Appendix D
Stormwater Pollution Prevention Plan for the
Cosumnes Power Plant Project

Draft 1.2

Cosumnes Power Plant Project

Construction Storm Water Pollution Prevention Plan

Prepared for
**Sacramento Municipal Utility District
(SMUD)**

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1.0 Introduction

1.1 Objectives

This Storm Water Pollution Prevention Plan (SWPPP) was developed to address the new construction activity associated with the Cosumnes Power Plant (CPP) Project. As required by the State Water Resources Control Board (SWRCB), this SWPPP was developed and will be amended or revised, when necessary, to meet the following objectives:

- Identify all pollutant sources including sources of sediment that may affect the quality of storm water discharges associated with construction activity (storm water discharges) from the construction site;
- Identify non-storm water discharges;
- Identify, construct, implement, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site during construction, and
- Develop a maintenance schedule for BMPs installed during construction designed to reduce or eliminate pollutants after construction is completed (post-construction BMPs).

1.2 Project Overview

CPP will be a high-efficiency, combined-cycle natural gas-fired generating facility that will provide electricity to customers of the Sacramento Municipal Utility District (District). The CPP will be located south of the decommissioned Rancho Seco Nuclear Generating Station in Sacramento County, 25 miles southeast of the city of Sacramento. The project will be located on a 30-acre parcel that is part of 2,480 acres owned by the District. The project also includes 26 miles of installed natural gas pipeline. The general site vicinity and proposed gas line route are shown in Figure 1.

The site is crossed by 3 ephemeral drainages, all of which join Clay Creek within 0.25 mile of the site. These drainages have distinct hydrologic features, and some vegetation that indicate that they would be defined as jurisdictional wetlands, according to Army Corps of Engineers (ACOE) criteria. The project proposes to divert these drainages around the proposed site to maintain local drainage and minimize erosion.

The proposed CPP project will consist of the following features

- A nominal 1,000-megawatt (MW) combined-cycle generating facility, using natural gas-fired combustion turbines, steam turbines, and associated infrastructure. The plant will be constructed in two phases of 500MW.
- A 230-kilovolt (kV) switchyard
- Approximately 0.4 mile long new 230 kV transmission line from the switchyard onsite to the existing 230-kV switchyard at the Rancho Seco Nuclear Plant
- Approximately 26 miles of natural gas supply pipeline
- A package treatment plant will provide domestic water by treating surface water from the Folsom-South Canal pipeline
- Approximately 1.5 acres storm water detention pond
- A package treatment/leach system for sanitary wastes

1.3 Project Ownership

The CPP project transmission lines and natural gas supply line will be owned and operated by the District.

1.4 Implementation Schedule

The general construction phases for the CPP project as they pertain to storm water management are expected to be as follows:

Premobilization

- Award contracts
- Drive Test Pilings
- Approval for Site Preparation

Project Site

Award Construction Contract	5/12/2003	
Award Piling Contract		
Clear and Grub Site	6/11/2003	7/11/2003
Stripping/ Earthwork Site	6/15/2003	7/21/2003
Stripping/ Earthwork Roads	6/25/2003	7/16/2003
Install Construction Water Line	7/4/2003	7/14/2003
Storm Drain Piping	7/8/2003	8/19/2003
Complete Construction Access Roads	7/6/2003	
Final Grading and Paving	8/25/2003	11/17/2003
Construct HRSG Structures	7/8/2003	5/3/2004
Complete Construction	5/3/2004	8/5/2005

A Notice of Intent (NOI) to comply with the terms of the General Permit To Discharge Storm Water associated with Construction Activity will be prepared and submitted prior to commencing construction. The SWPPP will be amended whenever there is a change in construction or operations that may affect the discharge of pollutants.

1.5 Plan Availability

The SWPPP will remain on the construction site while the project is under construction during working hours, commencing with the initial construction activity and ending with termination of coverage under the General Permit. A copy of the California General Permit will also be maintained on the construction site. The SWPPP will be provided to the Regional Board upon request, and be made available to the public only through the Regional Board.

2.0 Site Description

2.1 Site Description and Project Activity

The selected contractor will review and amend this plan and finalize construction project BMPs after project award. Site conditions, including paved areas, buildings, lots and roadways, general topography and drainage patterns for storm water collection are shown for the following phases of construction:

- Existing Site Topography – Existing topography for the CPP Site is shown in Figure 3.
- Rough Grading – A Rough Grading Plan is provided as Figure 4.
- Stabilized Site – A Detailed Finish Grading and Drainage Plan with figures will be prepared showing the final conditions of the site as constructed.
- Finished Project – A Site Map for the CPP Site showing the completed Generating Facility and all associated linears and plant auxiliaries in Figure 5.

2.2 Vegetation and Soils

Grazed annual grassland and ruderal vegetation dominate the project site. Introduced mediterranean grasses such as brome, oats, and barley characterize annual grassland. Dominant forbs tend to be introduced species such as storksbill, wild radish, and mustard. Other species that occur commonly are bristly ox-tongue, common bindweed, broadleaf plantain, Italian ryegrass, slender oat grass, shepherds purse, thistle, and common malva. These species are widespread and are typical of disturbed grasslands.

Soils associated with the project construction area are mapped as level or gently sloping (<2.0 percent), primarily comprising Redding Gravelly Loam. A detailed discussion of the soil at and around the project site is found in Chapter 8.9 of the Application of Certification (SMUD 2001).

2.3 Hydrology

Most of the precipitation in the project area falls between November and March. The total annual average rainfall in Sacramento is 18.6 inches. Monthly average rainfall in the Sacramento area near the project site is presented in Table 1.

TABLE 1
Average Monthly Rainfall in the Proposed Project Area (Sacramento)

Precipitation	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Rainfall (in.)	4.4	2.4	2.0	1.4	0.2	0.3	0.0	0.1	0.1	1.2	2.7	2.9

2.4 Estimated Total Site Area and Total Disturbed Area

Construction of the CPP and associated gas pipeline include building facilities, parking and road laydown areas, trenching and directional drilling, land grading, and other activities. The quantity of soil excavated and replaced during construction of the pipeline and project

site is 54,000 and 16,000 cubic yards, respectively. The estimated areas disturbed during project construction are as follows:

Generating Facility and Detention Basin	30 acres
Equipment Laydown Area and Construction Parking	20 acres
Construction Access Road	1.5 acres
Electrical Transmission Lines	7.3 acres
Natural Gas Supply Line	212 acres
Water Supply	3.7 acres
Potable Water Line	4.6 acres

Total disturbance would be 244.5 acres temporary, and 32.46 permanent.

2.5 Existing Drainage

Currently, excess storm water runoff sheet flows to the north and east, where it is captured by Clay Creek (0.1 mile from site) and discharges into Hadselville Creek approximately 2 miles west of the project site, eventually draining into the Sacramento-San Joaquin Delta. Other surface waters in the project area include Folsom-South Canal and Rancho Seco Reservoir. The Folsom-South Canal is elevated 20 feet above grade. The Rancho Seco Reservoir is 0.25 mile east of the site at approximately 100 feet above the site.

Table 2 summarizes the rainfall depth expected at various return frequencies and the corresponding total runoff expected at the site. The runoff values are based on a site area of 25 acres.

TABLE 2
Storm water Runoff Prior to Construction

Return Period of Storm (years)	Rainfall Depth for 24-hr Storm ^a (inches)	Total Runoff from Site for 24-hr Storm (millions of gallons)
10	2.60	0.53
25	3.05	0.62
50	3.37	0.68
100	3.68	0.74

^a Source: Rainfall Depth Duration Frequency for Eagles Nest, California Department of Water Resources, Sacramento County Station No. 269.

2.6 Proposed Drainage

Most of the site will be paved to provide internal access to all project facilities and onsite buildings. Areas of the site that will not be paved will have gravel surfacing, except for locations such as the storm water detention pond and areas designated for landscaping. The site will be designed to drain most storm water runoff to an onsite storm water detention pond (sediment basin) via a system of pipes, channels, and drains. From the detention pond, the storm water will be discharged to Clay Creek. The peak discharge from the detention pond will be regulated to less than the pre-construction flow rate for the 10-year storm. Figure 4 shows the post-construction runoff and drainage patterns for the developed site. Table 3 summarizes the calculated quantity of runoff for the project site after construction for various storm return periods.

TABLE 3
Storm water Runoff Following Construction

Return Period of Storm (years)	Rainfall Depth for 24-hr Storm (inches)	Total Runoff from Site for 24-hr Storm (millions of gallon)
10	2.60	1.26
25	3.05	1.46
50	3.37	1.61
100	3.68	1.76

^a Source: Rainfall Depth Duration Frequency for Eagles Nest, California Department of Water Resources, Sacramento County Station No. 269.

2.7 Construction Access Road

The site will be accessed for construction by proceeding east on Twin Cities Road, turning south into the joint entrance of the Rancho Seco Plant and Rancho Seco Park. The workers would then follow the road to Rancho Seco Park for a short distance. Once past the park's entrance gate, the workers would turn south and follow a construction access road that would be constructed from the gate house due south to Clay East Road (see Figure 2).

2.8 Earthwork

Excavation work will consist of removal, storage, and/or disposal of earth, sand, gravel, vegetation, loose rock, and debris to the lines and grades necessary for construction. Prior to commencing excavation work, all work areas will be staked to ensure that clearing and grading is restricted to the appropriate areas, thus minimizing the potential for erosion. Excavated materials suitable for backfill will be stored in stockpiles at designated locations using proper erosion protection methods. Where practical, topsoil will be segregated for reuse in areas that will be converted back to grassland or landscaped. Excess materials will be removed from the site and disposed of at an acceptable location. Disposal of any contaminated material encountered during excavation will comply with applicable federal, state, and local regulations.

Graded areas will be smooth, compacted, free from irregular surface changes, and sloped to drain. Structures will be designed to meet appropriate seismic requirements and California Building Code requirements. Areas to be backfilled will be prepared by removing

unsuitable materials and rocks. The bottom of an excavation will be examined for loose or soft areas. Such areas will be excavated fully and backfilled with compacted fill.

Backfilling will be done in layers of uniform, specified thickness. Soil in each layer will be properly moistened to facilitate compaction to achieve the specified density. To verify compaction, representative field density and moisture-content tests will be performed during compaction in accordance with ASTM standards.

2.9 Name of Receiving Water

Most storm water from the project site will be collected in the storm water detention pond and discharged to Clay Creek. A small part of the laydown area will discharge by sheet flow to the east of the project site (Figure 3). Clay Creek is a tributary to Hadselville Creek about 2 miles west of the project site. Hadselville is a tributary to Laguna, which discharges to the Cosumnes River near Highway 99.

2.10 Potential Pollutant Sources

Construction of the project will involve handling a large variety of building materials. The primary potential pollutant source for storm water during the construction of the CPP results from soil materials being exposed to wind and water movement. The greatest amount of soil will be exposed during the Preparation and Site Grading Phases of the project. Upon completion of the Foundation Phase, the amount of soil exposed will be significantly reduced. With the Best Management Practices (BMPs) described in this SWPPP, soils and sediments in storm water runoff from the CPP site will be minimized.

Other chemicals that could be potentially stored and used during construction of the facility include gasoline, diesel fuel, oil, lubricants (i.e., motor oil, transmission fluid, and hydraulic fluid), solvents, adhesives, and paint materials. There are no feasible alternatives to these materials for construction or operation of construction vehicles and equipment, or for painting and caulking buildings and equipment. Material Safety Data Sheets for each chemical used will be kept on site, and construction employees will be made aware of their location and content. The contractor will be responsible for assuring that the use, storage and handling of these materials will comply with applicable federal, state, and local LORS, including licensing, personnel training, accumulation limits, reporting requirements, and record keeping.

3.0 Erosion Control Plan

3.1 Best Management Practices (BMPs)

The following sections present standard construction Best Management Practices (BMPs) as described in the California Storm Water Best Management Practice Handbook (1993) and the Caltrans Storm Water Quality Handbook (2000). These resource handbooks provide comprehensive details on BMP implementation and will be obtained and reviewed by managers for all construction contractors that may have an impact on implementation of the SWPPP. Additional BMPs are described where appropriate. The contractors may implement additional control measures if necessary. Figure 5 indicates the location of various erosion control measures and BMPs relative to the construction area and site layout. Figures in Appendix H illustrate installation methods for various BMPs that are further discussed in the following sections.

3.2 General Erosion Control Measures

The project has been designed to impact as small an area as possible at any given time, thereby limiting the amount of disturbed vegetation and exposed soil. Construction is expected to proceed with all appropriate speed, as quickly as is reasonable and safe, thereby ensuring that as little soil is exposed for as short a time as possible. In general, all work areas will be surrounded by dikes, drainage swales, sand bags, or combinations of these to prevent run-on and uncontrolled run-off from the work area. General erosion and sediment controls may include installation of filter fabric fencing, fiber rolls, hay bale dike or silt fencing wherever appropriate.

All equipment will be maintained to prevent leaks and spills, and fueling will only be conducted within contained areas. Spill containment equipment will be available in the event they are needed. Any contaminated soils resulting from spills will be dug up as quickly as possible, and then removed from the site for proper disposal.

Following are general control measures that may be used throughout the project and in conjunction with more specific BMPs:

- Proper scheduling and sequencing of activities (EC-1)
- Material Use Management (WM-2)
- Solid and Hazardous Waste management (WM-5 and WM-6)
- Sanitary and Septic Waste Management (WM-9)
- Vehicle and equipment maintenance (NS-10)
- Vehicle and equipment refueling (NS-9)
- Spill prevention and control (WM-4)
- Employee and contractor training

3.2.1 Access Road, Entrance and Parking, Staging and Laydown Areas

Construction of the CPP and associated gas pipeline include building facilities, parking and road laydown areas, trenching and directional drilling, land grading, and other activities. An area of approximately 20 acres located directly across from the project site on the south side of Clay East Road will be devoted to construction laydown. During Phase 1 construction, this area will contain equipment, construction materials, and employee parking while a locked industrial container for all hazardous materials and the construction management trailers will be located on the Phase 2 site. During Phase 2 construction, this area will house equipment, construction materials, a locked industrial container for all

hazardous materials used during project construction, employee parking, and the construction management trailers. The concrete washout will also be located in the laydown area. Any refueling or equipment maintenance will be restricted to this area, whenever possible.

The laydown area will be fenced and constructed with a coarse aggregate throughout. It may be necessary to install geotextile matting prior to the coarse aggregate in certain parking, staging, and laydown areas to further assist with stabilization. Geotextile fabrics are used to improve stability of the foundation in locations subject to seepage or a high water table. All entrances and exits will be properly located to limit sediment leaving the site and to provide for maximum utility by all construction vehicles. In addition, vehicles exiting the construction area will be required to go through the wheel wash rack. If necessary, filter fabric fencing will be used at edges of areas subject to discharging into swales or ditches in order to minimize sediment discharge.

Figure 3 illustrates the general location of the construction laydown area. The following BMPs will be used for access areas, entrance, parking, staging and laydown areas:

- Silt fencing (SC-1)
- Stabilizing surfaces with coarse aggregate (TC-1 and TC-2)
- Compacting access road surfaces (TC-1 and TC-2)
- Proper scheduling and sequencing of activities (EC-1)
- Preservation of existing vegetation (EC-2)
- Placement of geotextile (EC-7)
- Dust control (WE-1)
- Earth dikes and drainage swales (EC-9)
- Straw bale barriers (SC-9)
- Vehicle and equipment cleaning (NS-8)

3.2.2 Site Grading, Drainage Swales and Storm Water Detention Pond

The site grading scheme is designed to route surface water around and away from all equipment and buildings. The proposed drainage design will slope to the north toward the drainage detention pond. Also, any spills of miscible chemicals in the containment areas and sumps will be drained to an enclosed oil/water separator. Storm water flows will be directed to the detention pond via pipes, drains, and swales. If necessary, periodic check dams, rock filters and/or straw bales will be placed in the swales to further reduce water velocity and trap sediment. In addition, petroleum-absorbing fabric may be staked into position at one or more of the check dams or straw bale barriers. At a minimum, the petroleum-absorbing fabric will be placed at the last check dam or barrier upstream of the storm water detention pond. This will limit or prevent hydrocarbons resulting from incidental leaks or drips occurring outside the spill containment areas from entering the pond. The detention pond will discharge to Clay Creek.

In addition, outlet protection composed of rock, riprap or concrete rubble may also be installed at the end of a drainage swale. The outlet protection reduces or eliminates scouring and erosion at the entrance into the storm water detention pond, further reducing water velocity which also allows for deposition of sediment before entering the pond. Furthermore, a means for closing the entrance into the pond (such as a gate or sufficient earthen material) will be available, if necessary. This will be used in the event of a spill on the project site, to prevent the contaminated material from entering the storm water detention basin. Similarly, the discharge from the storm water detention pond will be closeable, should it be necessary.

The following BMPs will be used during site grading, in drainage swales, and at the storm water detention pond:

- Earth dikes and drainage swales (EC-9)

- Check dams (SE-4)
- Straw bale barriers (SC-9)
- Gravel bag berm s(SE-6)
- Outlet protection (EC-10)

3.2.3 Foundation and Concrete Washout

As the foundation for the project structures are developed, drainage swales may be replaced with surface collectors and underground drainpipes. Sediments and hydrocarbons will be minimized or prevented from entering the surface collectors with storm drain inlet protection devices and rings of hydrocarbon-absorbing fabric.

A concrete washout site has been designated (Figure 4). Dumping of excess concrete and washing out of delivery vehicles will be prohibited at other locations on site. Notices will be posted to inform all drivers.

The following BMPs will be used around foundations:

- Concrete waste management (WM-8)

3.2.4 Site Stabilization and Demobilization

As construction nears completion, areas used for parking, storage and laydown will be stabilized. Areas that will continue to be used (for parking or storage) will have permanent storm water collection and conveyance structures provided, and other areas will be seeded and/or provided with landscaping and vegetative cover. Vegetative cover significantly reduces the likelihood of erosion and sediment transport. Vegetative coverage will be considered sufficient for purposes of submitting the Notice of Termination when 70% of pre-construction levels have been achieved. Native vegetation will be used whenever practical in revegetation efforts.

Vegetation restoration will be monitored following the completion of construction. Areas where vegetation is not re-established or where erosion takes place will be identified, and appropriate remedial actions implemented. Potential actions may include additional seeding, installation of irrigation systems to promote vegetation growth, regrading, or installation of engineered structures to control surface-runoff. Corrective actions will be implemented as soon as feasible, but not later than the start of the next rainy season.

Vegetation monitoring will be conducted as part of routine project maintenance activities, and after major storm events. Areas that have been re-seeded will be monitored at least annually for a period of 2 years following seeding. When needed, additional remedial measures will be implemented as part of the project maintenance program.

The following BMP will be implemented as a part of stabilizing the site and demobilizing:

- Preservation of existing vegetation (ES-2)
- Straw Mulch (EC-6)
- Hydro Seeding (EC-4)

3.3 Other Controls

3.3.1 Hazardous Materials

There will be a variety of chemicals stored and used during construction of CPP. The storage, handling, and use of all chemicals will be conducted in accordance with applicable laws, ordinances, regulations, and standards. Chemicals will be stored in appropriate chemical storage areas and completely used before disposing of the container. If necessary,

these areas will be designed to contain leaks and spills. Berm and drain piping designs should allow a full-tank capacity spill without overflowing the berms. For multiple tanks located within the same bermed area, the capacity of the largest single tank will determine the volume of the bermed area and drain piping.

The quantities of hazardous materials that will be onsite during construction are small, relative to the quantities used during operation. No acutely hazardous materials will be used or stored onsite during construction. The most likely possible incidents will involve a service or refueling truck, which, would present the worst-case scenario for the release of hazardous materials.

The small quantities of fuel, oil, and grease that may drip from construction equipment will have low relative toxicity and concentrations, and will be biodegradable. Equipment refueling will be performed away from water bodies to prevent contamination of water in the event of a fuel spill. If there is a large spill from a service or refueling truck, contaminated soil will be placed in barrels or trucks by personnel for off-site disposal.

Adequate supplies of absorbent material will be stored onsite for spill cleanup at all times. Plant personnel will use approved personal protective equipment during chemical spill containment and cleanup activities. Personnel will be properly trained in the handling of these chemicals and instructed in the procedures to follow in case of a chemical spill or accidental release.

The following BMPs will be implemented while managing hazardous materials:

- Material Delivery and Storage (WM-1)
- Material Use (WM-2)
- Spill Prevention and Control (WM-4)
- Vehicle and equipment maintenance (NS-10)
- Vehicle and equipment refueling (NS-9)

3.3.2 Solid and Hazardous Wastes

The construction of the facility will generate various types of non-hazardous solid wastes, including debris and other materials requiring removal during site grading and excavation, excess concrete, lumber, scrap metal, and empty non-hazardous chemical containers. Management of these wastes will be the responsibility of the construction contractor(s). The generation of waste materials will be minimized through efficient and careful use of materials, and recycling when possible. Non-hazardous materials will be used where acceptable to meet construction requirements. Drummed and bagged wastes will not be stored directly on the ground, and will be covered or stored indoors where feasible. Incompatible materials will be separated, and secondary containment will be provided for liquids. Sufficient spill cleanup materials will be kept in proximity to areas where materials are stored and used.

Small quantities of hazardous wastes will be generated over the course of construction. These may include waste paint, spent solvents, and spent welding materials. All hazardous wastes generated during facility construction will be handled and disposed of in accordance with applicable laws, ordinances, regulations, and standards. Hazardous wastes generated during construction will be collected in hazardous waste accumulation containers near the point of generation and moved daily to the contractor's 90-day hazardous waste storage area located on site. The accumulated waste will subsequently be delivered to an authorized waste management facility.

Contractor waste materials will be collected and stored in metal dumpsters provided by a licensed solid waste management company. The dumpster will meet local and state solid waste management regulations, and be provided with solid lids or removable flexible covers. Trash and construction debris will be deposited in the dumpsters, the dumpsters

will be covered, and then hauled offsite weekly to an approved landfill. No construction waste will be buried onsite. Personnel will be instructed as to proper disposal procedures, notices will be posted, and individuals will be designated to assure that the procedures are followed. A licensed contractor will regularly collect all sanitary wastes from portable units used during construction.

The following BMPs will be used at the designated storage locations:

- Material delivery and storage (WM-1)
- Material use (WM-2)
- Spill Prevention and Control (WM-4)
- Solid Waste Management (WM-5)
- Hazardous Waste Management (WM-6)
- Store hazardous materials indoors, if possible
- Use covered and lined dumpsters and containers, if possible

3.3.3 Groundwater Controls

The General Permit recognizes that certain non-stormwater discharges are necessary for economical construction, and allows these discharges provided that they do not cause a significant pollution problem. The General Permit conditionally allows the following non-stormwater discharges:

Uncontaminated groundwater resulting from dewatering activities
Uncontaminated groundwater infiltration (as defined at 40 CFR §35.2005(20))

The following BMPs would be used at dewatering sites

- Dewatering Operations (NS-2)

3.3.4 Offsite Vehicle Tracking

Because sediment reaching public roads generally has a clear path to wetlands and water bodies, controls will be used to minimize soils from being tracked off the project site from vehicles. The site roadways and parking areas are constructed of coarse aggregate to limit the amount of material adhering to tires. A construction vehicle tire wash rack will be installed near the exit to the project site. Paved roads located at the entrance of the construction site will be inspected daily and cleaned as necessary using manual or mechanical street sweepers.

The following BMPs would be used to reduce potential for offsite vehicle tracking:

Stabilizing construction entrance/ exit (TC-1)
Street Sweeping and vacuuming (SE-7)

3.3.5 Dust Suppression and Control

Wind erosion controls will be evaluated and implemented as needed throughout the duration of the project on all disturbed soils on the project site that are subject to wind erosion, and when significant wind and dry conditions are anticipated during project construction. Wind controls will be used to prevent the transport of soil from disturbed areas of the project site. The following control methods will be used for dust suppression, as necessary:

- Water aggregate roadways, parking areas and construction areas as needed (WE-1)

- Cover all trucks hauling soil, sand and other loose materials or require all trucks to maintain at least eighteen inches of freeboard (WE-1)
- Sweep adjacent streets and on-site paved roadways (SE-7)
- Hydroseed or apply soil stabilizers to inactive or completed construction areas as soon as is practical (ES-4)
- Enclose, cover, water or apply soil stabilizers to exposed stockpiles of sand, dirt, etc (WE-1).
- Limit traffic speed onsite to 15 mph or less (TC-1).
- Suspend excavation and grading during periods of high winds.

3.3.6 Other BMP Considerations

Although several BMPs were selected for this project, all BMPs were considered and evaluated. A list of all BMPs is summarized in Appendix B. Those not included in this SWPPP are noted accordingly and a brief statement describing its non-use is included.

4.0 Training

Prior to project startup, all designated onsite representatives will participate in a pre-project storm water training workshop. The workshop will cover basic storm water information, the requirements of the general permit, and the SWPPP. Specifically, the workshop will focus on implementation, inspection, and maintenance of storm water controls. Staff familiar with these topics will train all new employees.

As required by the SWRCB, individuals responsible for SWPPP preparation, implementation, and permit compliance will be appropriately trained, and the training will be documented. This includes those personnel responsible for installation, inspection, maintenance, and repair of BMPs.

All contractors are responsible for familiarizing their personnel with the information contained in the SWPPP. Contractors will be informed of this obligation and will be expected to have one or more employee training or briefing sessions conducted. The purpose of the meetings will be to review the proper installation methods and maintenance of all erosion control BMPs. Monitoring and inspection activities will only be conducted by individuals who have had additional training specific for this purpose. Records will be maintained of training.

Each contractor is required to certify that they understand the requirements of the SWPPP, and will perform their duties in accordance with its requirements. An example Certification Form is included as Appendix B. These signed Certifications will be collected by the Project Manager (or designee) to identify authorized contractors in the SWPPP (see Appendix C).

5.0 Maintenance, Inspection, and Repair

5.1 Maintenance

Erosion and sediment control structures must be maintained to remain effective. Features that are washed out or damaged will be repaired as soon as possible. Structures designed to accumulate sediment will have sediment removed in advance of the rainy season, and before major storm events. The following criteria will be used to determine whether erosion and sediment control features should be cleaned, repaired, or replaced:

- Sediment or other debris has accumulated to greater than one-third the height of sediment fabric fences or hay bale barriers
- Sediment or debris has reduced the storage capacity of sediment traps by 50% or more
- More than one-third of the cross-section of conveyance structures, such as drainage swales or ditches are plugged or blocked

In addition, the following maintenance activities will be performed:

- Paved roads immediately surrounding the construction site will be cleaned as necessary using manual or mechanical street sweepers.
- Coarse aggregate on access roads and parking areas will be maintained so as to limit sediment tracking and creation of dust.
- Coarse aggregate surfaces and excavations will be watered to limit the generation of dust (but will not be excessively watered so as to generate runoff).
- All equipment will be maintained according to manufacturers' specifications so as to prevent leaks and spills.
- Any contaminated soils resulting from spills will be dug up as quickly as possible, and then removed from the site for proper disposal.

5.2 Inspections and Record Keeping

Inspections of the construction site will be conducted prior to anticipated storm events and after actual storm events. This will be accomplished by conducting weekly inspections. In addition, inspections will be made during each 24-hour period during extended storm events. SWPPP inspections may be conducted in conjunction with other facility inspections. For instance, if a regulated amount of petroleum materials is on site and there is a Spill Prevention, Control and Countermeasures Plan (SPCC) in effect, the SWPPP inspections may be conducted in conjunction with SPCC inspections.

The goals of these inspections are (1) to identify areas contributing to a storm water discharge; (2) to evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate, properly installed and functioning in accordance with the terms of the General Permit; and (3) whether additional control practices or corrective maintenance activities are needed.

Personnel responsible for inspections before, during and after storm events will receive additional training specific for this purpose. This can take the form of formal classroom training and/or "walk-around" with an experienced individual, who discusses the appropriate conditions and those conditions requiring action. The Project Manager (or designee) will maintain a list of authorized inspection individuals for the SWPPP (Appendix E).

All required inspections will be recorded on an inspection checklist. Records of SWPPP inspections will be maintained onsite for at least three years. An example checklist will contain, at a minimum, the following information required by the RWQCB:

- Inspection date.
- Weather information: best estimate of beginning of storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall (inches).
- A description of any inadequate BMPs.
- If it is possible to safely access during inclement weather, list observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list result of visual inspection at relevant outfall, discharge point, or downstream location and projected required maintenance activities.
- Corrective actions required, including any changes to SWPPP necessary and implementation dates.
- Inspector's name, title, and signature.

Records of all monitoring information, copies of all reports required by the general storm water permit, and records of all data used to complete the Notice of Intent for the construction activity shall be held, retained, and kept by the facility operator and/or contractor for 3 years.

The facility operator and/or contractor will annually certify that its construction activity is in compliance with the requirements of this general permit and its SWPPP. Noncompliance notifications will be submitted within 30 days of identification of noncompliance.

Equipment, materials, and workers will be available for rapid response to failures and emergencies. All corrective maintenance to BMPs will be performed as soon as possible.

Prior to beginning construction, names of responsible personnel will be added to this plan.

6.0 Sampling and Analysis Program

Dischargers of storm water associated with construction activity that directly enters a designated impaired water body shall conduct a sampling and analysis program for the pollutants (sedimentation/siltation or turbidity) causing the impairment.

The project as proposed will not discharge directly to any impaired water body and therefore proposes no sampling and analysis program.

7.0 Non-Storm Water Management

7.1 General

Non-storm water management at the construction site mainly involves prevention of contamination in runoff. Non-storm water discharges from the project site are not anticipated due to effective implementation of control practices.

7.2 Inventory for Pollution Prevention Plan

The following substances are expected to be present on site during construction:

- Concrete
- Paints
- Detergents
- Fertilizers
- Fuels
- Lubricants
- Lumber
- Solvents

As required by state and federal law, contractors will be required to have inventories of hazardous materials. If the use of other types of hazardous materials at the site becomes necessary, the SWPPP will be amended to include them. See Appendix B for a more extensive list of potential pollutants on-site.

7.3 Hazardous Materials Management Plan

A variety of chemicals will be stored and used during construction of the facility. Hazardous materials to be used during construction include unleaded gasoline, diesel fuel, oil, lubricants (i.e., motor oil, transmission fluid, and hydraulic fluid), solvents, adhesives, paint materials, and building materials such as asphalt, sealants, and concrete. There are no feasible alternatives to these materials for construction or operation of construction vehicles and equipment, or for painting and caulking buildings and equipment.

In general, construction contractors will use lubricating oils, solvents, and other hazardous materials during construction of CPP. The contractor will be responsible for assuring that the use, storage and handling of these materials will comply with applicable federal, state, and local LORS, including licensing, personnel training, accumulation limits, reporting requirements, and record keeping.

7.4 Prevention of Non-Storm Water Discharges

There will be specific designated temporary waste storage areas on site. These areas will be contained within earthen berms or an equivalent barrier measure. Non-hazardous construction wastes (trash and construction debris) will be collected and placed into commercial disposal containers as soon as possible.

BMPs that will be implemented to prevent non-storm water discharges include:

- Monitor all vehicle and equipment fueling and maintenance activities; perform fueling offsite wherever possible
- Secondary containment for hazardous material delivery and storage areas to prevent spills or leakage of liquid material from contaminating soil or soaking into the ground

- Train employees on the proper use of materials such as fuel, oil, asphalt and concrete compounds, paints, solvents, etc.
- Regularly remove construction wastes
- Store all liquid wastes in covered containers
- Use portable toilet facilities managed and regularly serviced by a licensed contractor
- Restrict vehicle and equipment washing to designated areas

7.4.1 Good Housekeeping

The following good housekeeping practices will be followed on site during the construction project:

- An effort will be made to store only enough product required to do the job.
- All materials stored on site will be stored in a neat, orderly manner in their appropriate containers, and, if possible, under a roof or other enclosure.
- Products will be kept in their original containers with the original manufacturer's label.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Storage areas including equipment storage will be inspected for visible signs of oil or other spillages.

7.4.2 Product Specific Practices

The following product specific practices will be followed onsite:

Petroleum Products: All onsite vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the potential for leakage. Petroleum products will be stored in tightly sealed containers that are clearly labeled. Asphalt substances used on site will be applied according to the manufacturers' recommendations.

Fertilizers: In the event fertilizers are required during revegetation, they will be applied only in the minimum amounts recommended by the manufacturer. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

Paints: Containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed of according to manufacturers' instructions and State and local regulations.

Concrete: Equipment used for concrete mixing and transport will not be allowed to wash out or discharge surplus concrete or drum wash water on the site except in designated areas specifically designated for rinse out as indicated in Section 3.2.3. Wash water will be contained in a temporary pit where waste concrete can harden for later removal. Fresh concrete washing will be avoided unless runoff can be drained to a bermed or level area, away from waterways and storm drain inlets.

7.4.3 Spill Prevention Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted and personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite, and will include, but not limited to brooms, dustpans, mops, rags, gloves, goggles, absorbents (e.g., kitty litter, sand, sawdust), and plastic and metal trash containers specifically for this purpose.
- Spills will be cleaned up immediately after discovery.

- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from and contact with a hazardous substance.
- The Project Manager (or designee) will be the spill prevention and cleanup coordinator. The names of additional responsible spill personnel and authorized contractors will be posted in various areas.
- Spills of toxic or hazardous materials will be reported to the Project Supervisor (or designee) regardless of the size.
- Spills of hazardous materials that exceed their reportable quantities will be reported to all appropriate local, state and federal government agencies.

Contaminated soil or debris that cannot be recycled, reused or salvaged, will be collected and stored in securely lidded dumpsters rented from a licensed solid waste management company. The dumpsters will meet all local and State of California solid waste management regulations. Potentially hazardous wastes will be separated from known non-hazardous wastes. This includes the segregation of storage areas and proper labeling of containers. All waste will be removed from the site by licensed contractors in accordance with applicable regulatory requirements and disposed of at either local or regional approved facilities. No waste materials will be buried on site. All personnel will be instructed regarding the correct procedures for waste disposal. Notices stating these procedures will be posted in various areas.

The Project Manager (or designee) will be responsible for investigating spills and determining whether the reportable quantity has been exceeded. Regulations defining the reportable quantity levels for oil and hazardous substances are found in 40 CFR Part 110, Part 117 or Part 302. Should a release occur during construction activities which exceeds the reportable quantity, the following steps should be taken:

- Notify Local Emergency Response Agency at 911
- Notify the National Response Center immediately at 800-424-8802
- Notify Governor's office of Emergency Services Warning Center at 805-852-7550

A written description of the release should be submitted to the EPA Regional Office providing the date, circumstances of the release, and the preventative measures taken to prevent further releases.

7.4.4 Isolation of Potentially Hazardous Materials

A supply of drums will be available in the event of spills of known materials or if potentially hazardous materials are found during project construction. The contaminated material will be placed in the drums, sealed and placed in a storage area to await proper characterization and disposal. The sealed drums should be further placed in a lined roll-off container with a tarpaulin cover. In this case, the potentially hazardous materials are stored in a marked covered area that has secondary containment. In the event that a larger amount of material needs to be isolated, it will be placed directly into a lined roll-off container from a licensed hazardous waste transporter. The roll-off container will be placed out of the flow of construction traffic and equipment, in a bermed area to contain and isolate possible leaks and rainwater. In the unlikely event that even larger volumes of potentially hazardous material must be temporarily held awaiting disposition, a containment area will be constructed. Plastic sheeting will be laid on the ground prior to placement of the contaminated material and the material itself will be covered. A berm will surround the covered material to keep any rainwater from leaving the site.

8.0 Waste Management and Disposal

All wastes (including waste oil and other equipment maintenance waste) from CPP construction shall be disposed of in compliance with federal, state, and local laws, regulations, and ordinances. Specific waste management and disposal procedures have been addressed in previous sections of this plan (see Section 3.3.2).

9.0 Annual Review and Certification

Annually, the Project Manager (or designee) will review performance under the SWPPP and certify that construction activities are in compliance with the requirements of the Storm Water General Permit and the SWPPP. This Certification shall be based upon knowledge of construction activities and the site inspections conducted in accordance with the General Permit. The certification must be completed by July 1 of each year, and maintained for at least three years. If necessary, amendments to the SWPPP will be prepared and submitted at this time.

10.0 SWPPP Administration

The Project Manager (or designee) will be identified in this SWPPP as the qualified person(s) assigned responsibility to ensure full compliance with the permit and implementation of all elements of the SWPPP, including the preparation of the annual compliance evaluation and the elimination of all unauthorized discharges.

The following lists required as part of the SWPPP will be maintained by the Project Manager:

- List of authorized contractors who have signed certifications that they understand and will comply with the SWPPP will be maintained in Appendix D. Additional information including current and emergency telephone numbers, address, contractor's responsibilities, and the specific names of individuals responsible for implementation of the SWPPP will also be maintained.
- List the name and telephone number of the qualified person(s) who have been assigned responsibility for pre-storm, post-storm, and storm event inspections (Appendix E).
- List of amendments will be maintained from the date of the first amendment prepared to the date of the most recent amendment (Appendix G). The SWPPP and each amendment will be certified by the Project Manager (or designee).

11.0 Contractors/Subcontractors

The prime construction contractor will be included in this SWPPP upon award of the construction contract. Portions of the work are likely to be subcontracted to various specialty contractors. All subcontractors will be required to comply with the requirements of this permit. A list of authorized contractors/subcontractors will be maintained in Appendix D.

12.0 SWPPP Certification

The contractor who is authorized to implement and amend this SWPPP will be required to sign and certify that the SWPPP is in conformance with the General Permit. The Contractor is designated as the responsible party for the overall storm water management at the site. By signing the Certification (see Appendix B), the Contractor agrees to the following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel prepared the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for preparing the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

13.0 SWPPP Approval

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel prepared the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for preparing the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed

Position

Date

14.0 Notice of Intent

A copy of the Notice of Intent to obtain coverage under the State General Construction Activity Storm Water Permit is included in Appendix A. The Notice of Intent will be filed prior to initiation of project construction.

Appendix A Notice of Intent



State Water Resources Control Board
NOTICE OF INTENT
TO COMPLY WITH THE TERMS OF THE
GENERAL PERMIT TO DISCHARGE STORM WATER
ASSOCIATED WITH CONSTRUCTION ACTIVITY (WQ ORDER No. 99-08-DWQ)

I. NOI STATUS (SEE INSTRUCTIONS)

MARK ONLY ONE ITEM	1. <input checked="" type="checkbox"/> New Construction	2. <input type="checkbox"/> Change of Information for WDID#	
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II. PROPERTY OWNER

Name SMUD	Contact Person Kevin Hudson		
Mailing Address PO Box 15830 6201 S Street	Title Project Manager		
City Sacramento	State CA	Zip 95852-1830	Phone 916) 732-7101

III. DEVELOPER/CONTRACTOR INFORMATION

Developer/Contractor To be determined	Contact Person To be determined		
Mailing Address	Title		
City	State e	Zip	Phone ()

IV. CONSTRUCTION PROJECT INFORMATION

Site/Project Name Cosumnes Power Plant		Site Contact Person To be determined	
Physical Address/Location Clay East Road		Latitude _____°	Longitude _____°
City (or nearest City) Clay		Zip	County
		Site Phone Number () --	Emergency ()
A. Total size of construction site area: _____ 50 _____ Acres	C. Percent of site imperviousness (including rooftops): Before Construction: to be determined % After Construction: to be determined %		D. Tract Number(s): _____
B. Total area to be disturbed: _____ 50 _____ Acres (% of total 100)			E. Mile Post Marker: _____
F. Is the construction site part of a larger common plan of development or sale? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		G. Name of plan or development:	
H. Construction commencement date: 07 / 09 / 03		J. Projected construction dates: To Be Determined	
I. % of site to be mass graded: 100%		Complete grading: _____ / _____ / _____ Complete project: _____	
K. Type of Construction (Check all that apply): 1. <input type="checkbox"/> Residential 2. <input type="checkbox"/> Commercial 3. <input type="checkbox"/> Industrial 4. <input type="checkbox"/> Reconstruction 5. <input type="checkbox"/> Transportation 6. <input checked="" type="checkbox"/> Utility Description: _____ 7. <input type="checkbox"/> Other (Please List): _____			

V. BILLING INFORMATION

SEND BILL TO: <input checked="" type="checkbox"/> OWNER (as in II. above)	Name	Contact Person
<input type="checkbox"/> DEVELOPER (as in III. above)	Mailing Address	Phone/Fax
<input type="checkbox"/> OTHER (enter information at right)	City	State Zip

VI. REGULATORY STATUS

A. Has a local agency approved a required erosion/sediment control plan?.....	
Does the erosion/sediment control plan address construction activities such as infrastructure and structures?.....	
Name of local agency: <u>California Energy Commission</u>	Phone: (<u>916</u>) <u>654</u> --
B. Is this project or any part thereof, subject to conditions imposed under a CWA Section 404 permit of 401 Water Quality Certification?.....	
If yes, provide details: <u>404 Permit # XXXX; 401 Permit #XXXX</u>	

VII. RECEIVING WATER INFORMATION

A. Does the storm water runoff from the construction site discharge to (Check all that apply):	
1. <input type="checkbox"/>	Indirectly to waters of the U.S.
2. <input type="checkbox"/>	Storm drain system - Enter owner's name: _____
3. <input checked="" type="checkbox"/>	Directly to waters of U.S. (e.g. , river, lake, creek, stream, bay, ocean, etc.)
B. Name of receiving water: (river, lake, creek, stream, bay, ocean): <u>Clay Creek</u>	

VIII. IMPLEMENTATION OF NPDES PERMIT REQUIREMENTS

A. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (check one)	
<input type="checkbox"/>	A SWPPP has been prepared for this facility and is available for review: Date Prepared: ____/____/____ Date Amended: ____/____/____
<input checked="" type="checkbox"/>	A SWPPP will be prepared and ready for review by (enter date): <u>06/01/03</u>
<input type="checkbox"/>	A tentative schedule has been included in the SWPPP for activities such as grading, street construction, home construction, etc.
B. MONITORING PROGRAM	
<input checked="" type="checkbox"/>	A monitoring and maintenance schedule has been developed that includes inspection of the construction BMPs before anticipated storm events and after actual storm events and is available for review.
If checked above: A qualified person has been assigned responsibility for pre-storm and post-storm BMP inspections to identify effectiveness and necessary repairs or design changes..... <input type="checkbox"/> YES <input type="checkbox"/> NO	
Name: _____ Phone: () --	
C. PERMIT COMPLIANCE RESPONSIBILITY	
A qualified person has been assigned responsibility to ensure full compliance with the Permit, and to implement all elements of the Storm Water Pollution Prevention Plan including:	
1. Preparing an annual compliance evaluation..... <u>To be Determined</u> <input type="checkbox"/> YES <input type="checkbox"/> NO	
Name: _____ Phone: () --	
2. Eliminating all unauthorized discharges..... <input type="checkbox"/> YES <input type="checkbox"/> NO	

IX. VICINITY MAP AND FEE (must show site location in relation to nearest named streets, intersections, etc.)

Have you included a vicinity map with this submittal?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Have you included payment of the annual fee with this submittal?.....	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

X. CERTIFICATIONS

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that penalties for submitting false information, including the possibility of fine or imprisonment. In addition, I certify that the provisions of the permit, including the implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan will be complied with."	
Printed Name: _____	
Signature: _____	Date: _____
Title: _____	

Appendix B BMP Consideration List

The BMP checklist will be completed before pipeline construction begins.

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST				
All BMPs listed hereon were considered. Those BMPs which are not included in the SWPPP have been checked as "Not Used" with a brief statement describing why it is not being used. All selected BMPs have been discussed in this SWPPP.				
TEMPORARY SOIL STABILIZATION BMPs				
BMP No.	BMP	Check if Used	Check if Not Used	If Not Used, State Reason
ES-1	Scheduling	<input type="checkbox"/>	<input type="checkbox"/>	
ES-2	Preservation of Existing Vegetation	<input type="checkbox"/>	<input type="checkbox"/>	
ES-3	Hydraulic Mulch	<input type="checkbox"/>	<input type="checkbox"/>	
ES-4	Hydroseeding	<input type="checkbox"/>	<input type="checkbox"/>	
ES-5	Soil Binders	<input type="checkbox"/>	<input type="checkbox"/>	
ES-6	Straw Mulch	<input type="checkbox"/>	<input type="checkbox"/>	
ES-7	Geotextiles & /Mats	<input type="checkbox"/>	<input type="checkbox"/>	
ES-8	Wood Mulching	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Temporary Concentrated Flow Conveyance Controls</i>		<input type="checkbox"/>	<input type="checkbox"/>	
ES-9	Earth Dikes/Drainage Swales & Lined Ditches	<input type="checkbox"/>	<input type="checkbox"/>	
ES-10	Outlet Protection/ Velocity Dissipation Devices	<input type="checkbox"/>	<input type="checkbox"/>	
ES-11	Slope Drains	<input type="checkbox"/>	<input type="checkbox"/>	

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST

All BMPs listed hereon were considered. Those BMPs which are not included in the SWPPP have been checked as "Not Used" with a brief statement describing why it is not being used. All selected BMPs have been discussed in this SWPPP.

TEMPORARY SEDIMENT CONTROL BMPs

BMP No.	BMP	Check if Used	Check if Not Used	If Not Used, State Reason
SC-1	Silt Fence	<input type="checkbox"/>	<input type="checkbox"/>	
SC-2	Desilting Basin	<input type="checkbox"/>	<input type="checkbox"/>	
SC-3	Sediment Trap	<input type="checkbox"/>	<input type="checkbox"/>	
SC-4	Check Dam	<input type="checkbox"/>	<input type="checkbox"/>	
SC-5	Fiber Rolls	<input type="checkbox"/>	<input type="checkbox"/>	
SC-6	Gravel Bag Berm	<input type="checkbox"/>	<input type="checkbox"/>	
SC-7	Street Sweeping and Vacuuming	<input type="checkbox"/>	<input type="checkbox"/>	
SC-8	Sand Bag Barrier	<input type="checkbox"/>	<input type="checkbox"/>	
SC-9	Straw Bale Barrier	<input type="checkbox"/>	<input type="checkbox"/>	
SC-10	Storm Drain Inlet Protection	<input type="checkbox"/>	<input type="checkbox"/>	

WIND EROSION CONTROL BMPs

WE-1	Wind Erosion Control	<input type="checkbox"/>	<input type="checkbox"/>	
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TRACKING CONTROL BMPs

TC-1	Stabilized Construction Entrance/Exit	<input type="checkbox"/>	<input type="checkbox"/>	
TC-2	Stabilized Construction Roadway	<input type="checkbox"/>	<input type="checkbox"/>	
TC-3	Entrance/Outlet Tire Wash	<input type="checkbox"/>	<input type="checkbox"/>	

² Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be verified by the Contractor.

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST

All BMPs listed hereon were considered. Those BMPs which are not included in the SWPPP have been checked as "Not Used" with a brief statement describing why it is not being used. All selected BMPs have been discussed in this SWPPP.

NON-STORM WATER MANAGEMENT BMPs

BMP No.	BMP	Check if Used	Check if Not Used	If Not Used, State Reason
NS-1	Water Conservation Practices	<input type="checkbox"/>	<input type="checkbox"/>	
NS-2	Dewatering Operations	<input type="checkbox"/>	<input type="checkbox"/>	
NS-3	Paving and Grinding Operations	<input type="checkbox"/>	<input type="checkbox"/>	
NS-4	Temporary Stream Crossing	<input type="checkbox"/>	<input type="checkbox"/>	
NS-5	Clear Water Diversion	<input type="checkbox"/>	<input type="checkbox"/>	
NS-6	Illicit Connection/Illegal Discharge Detection and Reporting	<input type="checkbox"/>	<input type="checkbox"/>	
NS-7	Potable Water/Irrigation	<input type="checkbox"/>	<input type="checkbox"/>	
Vehicle and Equipment Operations		<input type="checkbox"/>	<input type="checkbox"/>	
NS-8	Vehicle and Equipment Cleaning	<input type="checkbox"/>	<input type="checkbox"/>	
NS-9	Vehicle and Equipment Fueling	<input type="checkbox"/>	<input type="checkbox"/>	
NS-10	Vehicle and Equipment Maintenance	<input type="checkbox"/>	<input type="checkbox"/>	

² Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be verified by the Contractor.

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST

All BMPs listed hereon were considered. Those BMPs which are not included in the SWPPP have been checked as "Not Used" with a brief statement describing why it is not being used. All selected BMPs have been discussed in this SWPPP.

NON-STORM WATER MANAGEMENT BMPs

BMP No.	BMP	Check if Used	Check if Not Used	If Not Used, State Reason
WM-1	Material Delivery and Storage	<input type="checkbox"/>	<input type="checkbox"/>	
WM-2	Material Use	<input type="checkbox"/>	<input type="checkbox"/>	
WM-3	Asphalt Concrete Stockpiles	<input type="checkbox"/>	<input type="checkbox"/>	
WM-4	Spill Prevention and Control	<input type="checkbox"/>	<input type="checkbox"/>	
WM-5	Solid Waste Management	<input type="checkbox"/>	<input type="checkbox"/>	
WM-6	Hazardous Waste Management	<input type="checkbox"/>	<input type="checkbox"/>	
WM-7	Contaminated Soil Management	<input type="checkbox"/>	<input type="checkbox"/>	
WM-8	Concrete Waste Management	<input type="checkbox"/>	<input type="checkbox"/>	
WM-9	Sanitary/Septic Waste Management	<input type="checkbox"/>	<input type="checkbox"/>	
WM-10	Liquid Waste Management	<input type="checkbox"/>	<input type="checkbox"/>	

² Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be verified by the Contractor.

Appendix C Contractor Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel prepared the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for preparing the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed

Position

Date

Appendix D Authorized Contractors

Contractor	Designated Responsible Person	Address	Telephone Number (current & emergency)	Responsibilities

Appendix E

Authorized Inspectors

Contractor	Designated Responsible Person	Telephone Number	Responsibilities

Appendix F SWPPP Inspection Form

GENERAL INFORMATION				
Contract Name				
Contract N°				
Inspector				
Inspector's Name				
Inspector's Title				
Inspector's Address				
Date of Inspection				
Inspection Type (Applicable)	<input type="checkbox"/> Prior to forecast rain <input type="checkbox"/> After a rain event <input type="checkbox"/> 24-hr intervals during extended rain <input type="checkbox"/> Other _____			
Weather (Applicable)	<input type="checkbox"/> Rainy <input type="checkbox"/> Non-Rainy			
Additional Data	Storm Start Date & Time:		Storm Duration (hrs):	
	Time elapsed since last storm (Circle Applicable Units)	Min. Hr. Days	Approximate Rainfall Amount (mm)	

PROJECT AREA SUMMARY AND DISTURBED SOIL AREA (DSA) SIZE LIMITS FROM SPECIAL PROVISIONS			
Total Project Area	_____ Hectares	_____ Acres	
Rainy Season DSA Limit	_____ Hectares	_____ Acres	
Field Estimate of Active DSAs	_____ Hectares	_____ Acres	

OTHER REQUIREMENTS				
Requirement	Yes	No	N/A	Corrective Action
Preservation of Existing Vegetation				
Is temporary fencing provided to preserve vegetation in areas where no construction activity is planned?				
Location:				
Location:				
Location:				

OTHER REQUIREMENTS				
Requirement	Yes	No	N/A	Corrective Action
Location:				
Temporary Soil Stabilization				
Does the applied temporary soil stabilization provide 100% coverage for the required areas?				
Are any non-vegetated areas that may require temporary soil stabilization?				
Is the area where temporary soil stabilization required free from visible erosion?				
Location:				
Location:				
Location:				
Location:				
Temporary Linear Sediment Barriers				
Are temporary linear sediment barriers properly installed in accordance with the details, functional and maintained?				
Are temporary linear sediment barriers free of accumulated litter?				
Is the built-up sediment less than 1/3 the height of the barrier?				
Are cross barriers installed where necessary and properly spaced?				
Location:				
Location:				
Location:				
Location:				
Location:				
Storm Drain Inlet Protection				
Are storm drain inlets internal to the project properly protected with either Type 1, 2 or 3 inlet protection?				
Are storm drain inlet protection devices in working order and being properly maintained?				
Location:				
Location:				
Location:				
Location:				
Location:				
Desilting Basins				
Are basins maintained to provide the required retention/detention?				
Are basin controls (inlets, outlets, diversions, weirs, spillways, and racks) in working order?				
Location:				
Location:				
Location:				
Location:				
Stockpiles				

OTHER REQUIREMENTS				
Requirement	Yes	No	N/A	Corrective Action
Are all locations of temporary stockpiles, including soil, hazardous waste, and construction materials in approved areas?				
Are stockpiles protected from run-on, run-off from adjacent areas and from winds?				
Are stockpiles located at least 15 m from concentrated flows, downstream drainage courses and storm drain inlets?				
Are required covers and/or perimeter controls in place?				
Location:				
Location:				
Location:				
Location:				
Concentrated Flows				
Are concentrated flow paths free of visible erosion?				
Location:				
Location:				
Location:				
Location:				
Tracking Control				
Are points of ingress/egress to public/private roads inspected and swept and vacuumed daily?				
Are all paved areas free of visible sediment tracking or other particulate matter?				
Location:				
Location:				
Location:				
Location:				
Wind Erosion Control				
Is dust control implemented adequately?				
Location:				
Location:				
Location:				
Location:				
Dewatering Operations				
Is dewatering handled in conformance with the dewatering permit or waiver issued by the RWQCB?				
Is required treatment provided for dewatering effluent?				
Location:				
Location:				
Location:				
Location:				
Vehicle & Equipment Fueling, Cleaning, and Maintenance				

OTHER REQUIREMENTS				
Requirement	Yes	No	N/A	Corrective Action
Are vehicle and equipment fueling, cleaning and maintenance areas reasonably clean and free of spills, leaks, or any other deleterious material?				
Are vehicle and equipment fueling, cleaning and maintenance activities performed on an impermeable surface in dedicated areas?				
If no, are drip pans used?				
Are dedicated fueling, cleaning, and maintenance areas located at least 15 m away from downstream drainage facilities and water courses and protected from run-on and runoff?				
Is wash water contained for infiltration/ evaporation and disposed of outside the highway right of way?				
Is on-site cleaning limited to washing with water (no soap, soaps substitutes, solvents, or steam)?				
On each day of use, are vehicles and equipment inspected for leaks and if necessary, repaired?				
Location:				
Location:				
Location:				
Location:				
Waste Management & Materials Pollution Control				
Are material storage areas and washout areas protected from run-on and runoff, and located at least 15 m from concentrated flows and downstream drainage facilities?				
Are all material handling and storage areas clean; organized; free of spills, leaks, or any other deleterious material; and stocked with appropriate clean-up supplies?				
Are liquid materials, hazardous materials, and hazardous wastes stored in temporary containment facilities?				
Are bagged and boxed materials stored on pallets?				
Are hazardous materials and wastes stored in appropriate, labeled containers?				
Are proper storage, clean-up, and spill-reporting procedures for hazardous materials and wastes posted in open, conspicuous and accessible locations adjacent to storage areas?				
Are temporary containment facilities free of spills and rainwater?				
Are temporary containment facilities and bagged/boxed materials covered?				
Are temporary concrete washout facilities designated and being used?				
Are temporary concrete washout facilities functional for receiving and containing concrete waste and are concrete residues prevented from entering the drainage system?				
Do temporary concrete washout facilities provide sufficient volume and freeboard for planned concrete operations?				
Are concrete wastes, including residues from cutting and grinding, contained and disposed of off-site or in concrete washout facilities?				
Are spills from mobile equipment fueling and maintenance properly contained and cleaned up?				
Is the site free of litter?				
Are trash receptacles provided in the Contractor's yard, field trailer areas, and at locations where workers congregate for lunch and break periods?				
Is litter from work areas within the construction limits of the project site collected and placed in watertight dumpsters?				
Are waste management receptacles free of leaks?				

OTHER REQUIREMENTS				
Requirement	Yes	No	N/A	Corrective Action
Are the contents of waste management receptacles properly protected from contact with storm water or from being dislodged by winds?				
Are waste management receptacles filled at or beyond capacity?				
Location:				
Location:				
Location:				
Location:				
Temporary Water Body Crossing or Encroachment				
Are temporary water body crossings and encroachments constructed as shown on the plans or as approved by the engineer?				
Does the project conform to the requirements of the 404 permit and/or 1601 agreement?				
Location:				
Location:				
Location:				
Location:				
Illicit Connection/Illegal Discharge Detection and Reporting				
Is there any evidence of illicit discharges or illegal dumping on the project site?				
If yes, has the Engineer been notified?				
Location:				
Location:				
Location:				
Location:				
Discharge Points				
Are discharge points and discharge flows free from noticeable pollutants?				
Are discharge points free of any significant erosion or sediment transport?				
Location:				
Location:				
Location:				
Location:				
WPCP/SWPPP Update				
Does the SWPPP, Project Schedule and adequately reflect the current site conditions and contractor operations?				
Are all BMPs shown on the project plans installed in the proper location(s) and according to the details for the plan?				
Location:				
Location:				
Location:				
Location:				

OTHER REQUIREMENTS				
Requirement	Yes	No	N/A	Corrective Action
General				
Are there any other potential water pollution control concerns at the site?				
Location:				
Location:				
Location:				
Location:				
Storm Water Monitoring				
Does storm water discharge directly to an impaired water body for Sedimentation/Siltation or Turbidity as listed in the General Construction Activity Permit?				
If yes, were samples for sedimentation/siltation or turbidity taken pursuant to the sampling and analysis plan, if required, during the rain event?				
Were there any BMPs not properly implemented or breaches, malfunctions, leakages or spills observed which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water?				
If yes, were samples for non-visually detectable pollutants taken pursuant to the sampling and analysis plan during the rain event?				
Were soil amendments (e.g. gypsum) used on the project?				
If yes, were samples for non-visually detectable pollutants taken pursuant to the sampling and analysis plan during the rain event?				
Did storm water contact stored materials or wastes and run off of the construction site? (Materials not in watertight containers, etc.)				
If yes, were samples for non-visually detectable pollutants taken pursuant to the sampling and analysis plan during the rain event?				

Appendix G
SWPPP Amendments

Project Name: Cosumnes Power Plant

Amendment No.	Date	Brief Description of Amendment	Prepared By

Appendix H

Erosion Control, Sedimentation and Restoration Plan Guidelines
